



July 18, 2006

SUBJECT: Sunnyvale Bicycle Plan Update – Study Issue**REPORT IN BRIEF**

The Sunnyvale Bicycle Plan serves as the primary planning and policy document relative to bicycling in Sunnyvale. City Council prioritized the update of the Sunnyvale Bicycle Plan as part of the 2005 Study Issue process based on the existing City Policy to periodically “Reassess all goals, policies and action statements and make appropriate additions, deletions and modifications to the Bicycle Plan”. The Study Issue Paper is attached (Attachment A). The current Bicycle Plan was completed in 1993. However the *1998 Sunnyvale Bicycle Opportunities Study*, the *2000 Bicycle Capital Improvement Program (CIP) Study*, and the 2000 (and subsequently 2004) *Bicycle Transportation Plan* have been completed to augment the 1993 Bicycle Plan. All three documents have been heavily used to guide Sunnyvale bicycle planning and project programming, and to promote increased bicycling on both a local and regional basis. Since the 1993 bicycle plan was adopted, the City has installed an additional 48 miles of bicycle lanes on City streets. The City currently has a total of 79 miles of bike lanes.

There have been many bicycle related improvements within the last 10 years. These changes have been incorporated into the proposed 2006 Bicycle Plan (Attachment B). In addition, many of the goals, policies and action statements have been updated or revised in order to more effectively meet the needs of the bicycling community. Lastly, the 2000 Bicycle CIP has been updated and incorporated into the Plan.

BACKGROUND

The Sunnyvale Bicycle Plan serves as the primary planning and policy document relative to bicycling in Sunnyvale. In December 2005 the City Council prioritized the update of the Sunnyvale Bicycle Plan as part of the Study Issue process based on the existing City Policy to periodically “Reassess all goals, policies and action statements and make appropriate additions, deletions and modifications to the Bicycle Plan”. The current Bicycle Plan was completed in 1993. However the *1998 Sunnyvale Bicycle Opportunities Study*, the *2000 Bicycle Capital Improvement Program (CIP) Study* and the 2004 Bicycle Transportation Plan have been completed to augment the 1993 Bicycle Plan. All three documents have been heavily used to guide Sunnyvale bicycle planning and project programming, and to promote increased bicycling on both

a local and regional basis. The 2006 Bicycle Plan update will update and formally incorporate elements of these documents.

1998 Bicycle Opportunities Study

The Bicycle Opportunity Study, adopted by City Council on October 26, 1999 (RTC #99-446), represented the broad planning phase of the effort to provide a comprehensive on-road bicycle network in Sunnyvale. The Study inventoried the physical condition and usage of all arterial and collector streets in the City. This information was then analyzed to determine what types of actions would be most rational to provide bike lanes or improved shoulders. From the evaluation, a set of recommendations for action was prepared on a roadway segment by roadway segment basis.

2000 Bicycle Capital Improvement Program (CIP) Study

The Bicycle CIP, adopted by City Council on December 19, 2000 (RTC #00-422), refined the results of the Bicycle Opportunities Study. The CIP Study provided a project prioritization tool, quantified the resources necessary to achieve the program, and established a funding and programming strategy to address the goal of providing a comprehensive bikeway network on Sunnyvale's Collector and Arterial streets.

2000/2004 Bicycle Transportation Plan

The Bicycle Transportation Plan (BTP) was produced in 2000 and updated in 2004 in order to be eligible to compete for regional bicycle funding. The Sunnyvale Bicycle Transportation Plan (BTP), approved by City Council on December 18, 2003 (RTC #03-433), compiled by staff, was prepared solely for the purpose of compiling relevant information for Bicycle Transportation Account (BTA) program eligibility. It is a compilation of existing information and is not intended to be a new stand alone City policy or planning reference and does not implement any new or changed policies or programs. It includes and is consistent with the 1993 Sunnyvale Bicycle Plan as well as the relevant sections of the Land Use and Transportation Element. It has also incorporated the 2000 Bicycle Capital Improvement Program. The BTP is consistent with current City Policy as well as county and regional bike plans, air quality and energy conservation plans.

The Sunnyvale Bicycle and Pedestrian Advisory Committee was integrally involved in the development of all of these studies.

EXISTING POLICY

Land Use and Transportation Element

C3.5, Support a variety of transportation modes.

C3.5.4, Maximize the provision of bicycle and pedestrian facilities.

C3.5.1, Promote alternate modes of travel to the automobile.

C3.5.5, Implement the Sunnyvale Bicycle Plan.

1993 Bicycle Plan

BP.A1, The City of Sunnyvale shall facilitate bicycling through its transportation planning process.

BP.A1.b, Prepare a bicycle capital improvements list for Sunnyvale and/or TDA Article 3 funding.

BP.B, Provide for and maintain a safe and effective system of bikeways and shared roadway facilities suitable for bicycles.

Update Procedure, Update every five years to reassess all goals, policies and action statements and make appropriate additions, deletions, and modifications to the Bicycle Plan.

DISCUSSION

The proposed *2006 Sunnyvale Bicycle Plan* is a planning document that is built on the framework of the existing *1993 Bicycle Plan*, as well as the subsequent bicycle planning tools, the *1998 Bicycle Opportunities Study*, the *2000 Bicycle Capital Improvement Program Study*, and the *2000/2004 Bicycle Transportation Plan*.

The proposed plan includes the following information

1. Update of Community Conditions – This section describes existing conditions relating to bicyclists and bicycling in Sunnyvale. This includes:
 - A description of who is biking in Sunnyvale and for what reason. Demographic information is included, as well as transit ridership information and school commute data.
 - A description of Sunnyvale's existing Bike Network. This includes the locations of the existing bicycle trails, lanes and routes, as well as bicycle parking facilities.
 - A description of the relationship of this plan to existing City and regional policy and plans.
 - An analysis of bicycle related collisions.
 - A discussion of existing educational and encouragement campaigns and programs.
2. Identification of Issues and Findings – This section discusses some of the issues that were identified as part of the analysis of existing conditions.

3. Update of Goals, Policies and Action Statements – The Goals, Policies and Action Statements listed in the 1993 Bicycle Plan have been revised and updated to reflect the changes that have occurred, and the actions that have been accomplished since the last plan.
4. Update of the Bicycle Capital Improvement Program – This section updates the results of the 2000 Bicycle CIP Study. A large number of projects have been constructed and the shape of the existing bicycle network has changed significantly since (and largely because of) the start of the 2000 Bicycle CIP. In the plan, the bike network segments have been re-evaluated and updated.

Description of Proposed Goals

There are four main goals that are proposed to be included in the plan. Many of these goals are similar to the existing goals, but the policies and action statements have been tailored to reflect changes that have been made to the bicycling environment since the development of the 1993 plan.

- A. Provide a bikeway network that supports bicycle trips to work, school, shopping and for recreation.

The purpose of this goal is to guide the implementation of the Sunnyvale Bicycle Network to facilitate and encourage bicycling to work, school or shopping, in addition to recreation. This will be done through the implementation of the Bicycle CIP. A change since the last plan is the emphasis of policy to facilitate the link between bicycles and transit and different transportation modes. All buses and trains in Sunnyvale can now accommodate bicycles on board. This development makes transit much more attractive and competitive with the automobile. It is often the last mile, the part of the trip from the destination to the transit stop, that is prohibitively long to walk, but too short for an additional transit leg. Biking is an ideal mode of transportation to bridge this gap. The new policy proposes to encourage the link between transit and bicycling.

The proposed policy also emphasizes the recreational opportunities that exist for bicyclists, primarily along the flood control channels. Since the development of the last plan, the Santa Clara Valley Water District has instituted a policy to allow for and in some cases fund the development of flood control channels for recreational use. The proposed policy specifically lists the East Channel and West Channel for consideration of trail development in the future. The goal also emphasizes the need to coordinate with Mountain View regarding connections to the Stevens Creek Trail from Sunnyvale streets south of El Camino Real.

B. Create and follow transportation planning, funding, design, construction and maintenance practices that support bicycling.

The purpose of this goal is to institutionalize bicycle transportation considerations through the development and update of bicycle planning tools and zoning codes, the pursuit of grant funding opportunities, and the integration of bicycle transportation considerations into the everyday duties of the City staff. A change since the last plan is the inclusion of a policy to consider zoning code changes to require bicycle parking facilities at commercial, residential, office, and industrial land uses.

Policies within this goal also emphasize the importance of budgeting for maintenance and operation of the bicycle facilities that get constructed. This includes regular street sweeping, maintenance of striping and pavement markings and detector loop upkeep.

C. Educate bicyclists and motorists as to their rights and responsibilities, and encourage bicycling for transportation and recreation.

This goal emphasizes the importance of education as part of a larger program to encourage increased bicycling in the City. The goal distinguishes that there should be education programs tailored to elementary school age children, middle school age children and adults/high school teens. Each of these age groups have different educational and transportation needs and the proposed policy recommends that the city encourage education curriculum be developed accordingly.

D. Provide for enforcement regarding the rights and responsibilities of bicyclists and motorists.

Enforcement is also an important part of a larger program to encourage increased bicycling. Enforcement of the California Vehicle Code and the Sunnyvale Municipal Code as it relates to bicycles is important for the safety and education of bicyclists and motorists alike.

1993 Bicycle Plan - Goal Elements Achieved

The following is a list of the elements of the 1993 Bicycle Plan that have been achieved and therefore will not be included in the proposed Bike Plan Update.

- *Prepare a Bicycle CIP list for Sunnyvale.* This study was completed in 2000 and has been updated as part of the proposed plan. The proposed plan includes language to continue to update the bicycle CIP.

- *Support Countywide adoption of Transportation Demand Management Site Design Guidelines where developers provide appropriate design and support facilities to encourage bicycling.* The Santa Clara Valley Transportation Authority (VTA) has completed the Bicycle Technical Guidelines and the Land Use and Transportation Best Practices Manual. The City provided support and guidance during the development of both documents.
- *Establish a program to encourage bike support facilities in existing land uses, with the City taking the first steps by providing bike support facilities at City facilities where needed.* The City has installed bicycle parking facilities at the majority of City facilities. In addition, the City has an ongoing program to provide free bicycle racks to existing businesses. The City also requires bike parking as a condition of approval for all land use permits where appropriate. The provision of bicycle facilities in multi-family residential developments has also been made a code requirement.
- *Explore expansion of “bikes on buses program and re-open feasibility study on bicycles on CalTrain.* Bikes are now permitted on all VTA buses, VTA Light Rail cars and Caltrain cars.
- *Explore further opportunities to develop or enhance the area along the Hetch Hetchy Aqueduct as a bicycle trail.* The John W. Christian Greenbelt has been completed.
- *Explore the joint use of Santa Clara Valley Water District (SCVWD)-owned land for trail purposes.* A study was completed in 1993 that identified certain trail opportunities. Calabazas Creek Trail was subsequently built. The Moffett Park Specific Plan and the Tasman/Fair Oaks Pedestrian Circulation Plan call for the development of additional trails. The SCVWD now has a policy to encourage the use of SCVWD creeks for public use when reasonable and appropriate.
- *Participate in the planning of the Regional Bay Trail to assure access from Baylands Park.* The Bay Trail has been completed through the entire length of Sunnyvale. The section of the Bay Trail through Moffett Field has not yet been completed.
- *Study alternatives to provide more space for bicycles along major north-south streets such as Mathilda Avenue, Wolfe Road, Fair Oaks Avenue, and Lawrence Expressway.* This study has been completed as part of the Bicycle Opportunities Study and the Bicycle CIP.
- *Investigate modifying existing City ordinance to allow adult cyclists to ride on sidewalks when auto lane widths or other road conditions are prohibitive.* This was completed as part of a Municipal Code Review Study Issue in 2003.
- *Install traffic detection which is sensitive to bicycles in future and retrofitted roadway and bike lane projects where appropriate.* The City

has bicycle sensitive detection at all City operated traffic signals where appropriate.

Bicycle Capital Improvement Program

The proposed 2006 Bicycle Plan includes an update of the 2000 Bicycle CIP Study. This update includes removal of segments that have already been completed, an update of the ranking criteria, an update of cost estimates, and a reevaluation of the most likely bicycle facility improvement for each segment.

The Bicycle CIP update (as well as the 2000 CIP) proposes a bicycle network on all arterial and collector streets in Sunnyvale. Arterial and collector streets form the focus of the study as a means to concentrate the study on primary travel corridors. These corridors, by virtue of their definition and function, are likely to have more traffic (including bicycle traffic), and hence greater need for recognizing bicycle space on the roadway. By law and in practice cyclists can be found on any street, and should be anticipated on any street. Directness and continuity of route is as critical a factor in route selection of cyclists as it is for motor vehicle drivers, and arterials and collectors typically provide the most direct routes.

The 2000 Bike Capital Improvement Program Study process involved review of the Bicycle Opportunities Study findings, development and application of project ranking criteria, assessment of available/likely financial resources, and preparation of a funding plan/implementation schedule. The resulting work product was a long term "menu" of on-road bicycling improvements, a programming strategy, an initial programming schedule, and a financing plan recommendation. This study is intended to facilitate the long-term allocation of financial and other resources for bikeway development. The Program has eliminated piecemeal, reactive planning for bicycle facilities and replaced it with a long-term, reasoned, programmatic, sustainable approach.

Project Ranking Criteria

The Project ranking criteria that was used for the 2000 Bicycle CIP was maintained for the 2006 CIP update. Seven basic criteria were used and updated as part of the proposed plan, as follows:

Rider Stress – roadway configurations unfriendly to cycling, e.g. substandard lane widths, on-street parking

Collision History – bike collisions

Average Daily Traffic Volumes

Gap Closure – projects that create links between existing bikeways

Cost/Funding – total project cost, likelihood of outside funding

Connectivity – projects connecting to existing bikeways, activity centers, other cities

Complexity – degree of political, environmental, physical issues, intergovernmental coordination

The evaluation criteria were weighted based on input from staff and the Bicycle Advisory Committee. These criteria were applied to a list of project recommendations determined by staff and based on the Bicycle Opportunities Study findings in order to prioritize projects for implementation. Data contained in the Bicycle Opportunities Study and other data sources such as the City's collision database were supplemented with field observations and map study to complete project ranking sheets for each project.

Bikeway Improvements

There are nine categories of bicycle facility improvements that have been identified in the CIP. One additional possible improvement was added to the bike facility toolkit, the speed management option. This has been added for low volume residential collector streets where parking removal was previously recommended.

1. Simple re-striping (most of these have been completed, with the notable exception of El Camino Real)
2. Travel lane removal
3. Complete on-street parking removal
4. Parking removal, one side of the street
5. Daytime parking restrictions
6. Minor widening
7. Major widening
8. Shared use symbol
9. Speed management

A most likely improvement type was identified for each major roadway segment in the City.

CIP Assumptions

The Bicycle CIP Update assumes that more detailed planning would be necessary for all projects. All project types require a conceptual design effort, to determine physical feasibility. Several project types such as those involving

parking removal or road widening will require more detailed design, parking occupancy studies, and public outreach.

Therefore, staff is assuming that these projects, particularly projects involving parking removal, would be subject to study before any decision on construction was made. The Bike CIP Study recommendations therefore contain budget for studies for projects involving parking removal and road widening. Below is a map of the updated Bicycle CIP study recommendations.

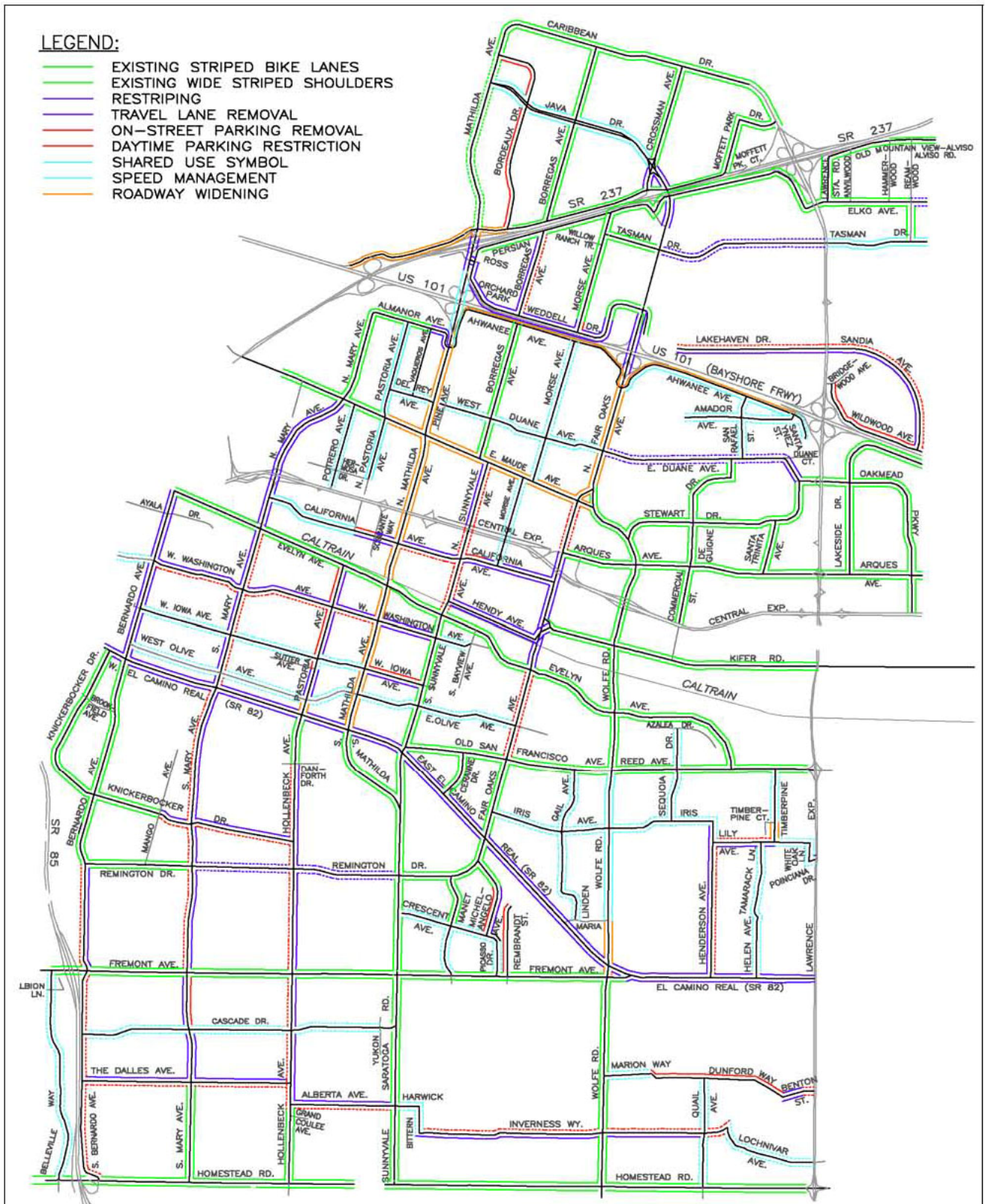


Figure 4.8: Summary of Recommendations

FISCAL IMPACT

There is no fiscal impact associated with the approval of this plan.

CONCLUSION

The last Sunnyvale Bicycle Plan was adopted in 1993. There have been many significant bicycle related changes and improvements since then. For example, the City has installed an additional 48 miles of bicycle lanes on City streets. The City currently has a total of 79 miles of bike lanes. In December 2005 the City Council prioritized the update of the Sunnyvale Bicycle Plan as part of the Study Issue process based on the existing City Policy to periodically “Reassess all goals, policies and action statements and make appropriate additions, deletions and modifications to the Bicycle Plan”.

The plan contains the following information:

1. Update of Community Conditions – This section describes existing conditions relating to bicyclists and bicycling in Sunnyvale. This includes,
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PUBLIC CONTACT

The Bicycle and Pedestrian Advisory Committee has been integrally involved in the development of the plan. The BPAC approved the project work plan on August 18, 2005. The BPAC reviewed and provided guidance at the following meetings: January 26, 2006, March 16, 2006, May 4, 2006, and May 18, 2006.

A public meeting was held during a regularly scheduled BPAC meeting on May 18, 2006. The meeting notice was published in the Sunnyvale Sun, posted on the weekly Neighborhood Association e-mail, sent to the Silicon Valley Bicycle Coalition and the Moffett Park Business and Transportation Association, a press release was distributed on May 15, 2006, and the meeting was announced during the Public Announcement section of the May 16, 2006 City Council Meeting. The Meeting Minutes are included in Attachment C.

The BPAC took action to recommend that City Council Approve the Bicycle Plan with Modifications on June 22, 2006. The requested modifications, included in the BPAC Minutes from June 22, 2006 (Attachment D), have all been incorporated into the Proposed 2006 Bicycle Plan.

ALTERNATIVES

1. Adopt Negative Declaration and approve the 2006 Sunnyvale Bicycle Plan, including the updated Bicycle Capital Improvement Program, as submitted.
2. Adopt the Negative Declaration and approve the 2006 Sunnyvale Bicycle Plan with modifications to the plan and/or Bicycle Capital Improvement Program.
3. Reject the 2006 Bicycle Plan and Bicycle Capital Improvement Program and discontinue planning for a comprehensive bicycle network on Sunnyvale City streets.

RECOMMENDATION

Staff and the BPAC recommend Alternative #1: Adopt the 2006 Sunnyvale Bicycle Plan, including the updated Bicycle Capital Improvement Program, as submitted.

Staff and the BPAC recommend that City Council adopt the 2006 Bicycle Plan. There have been many bicycle related improvements within the last 10 years. These changes have been incorporated into the proposed 2006 Bicycle Plan. In addition, many of the goals, policies and action statements have been updated or revised in order to more effectively meet the needs of the bicycling community. Lastly, the 2000 Bicycle CIP has been updated and incorporated into the Plan.

Reviewed by:

Marvin A. Rose, Director of Public Works

Prepared by: Dieckmann Cogill, Senior Transportation Planner

Approved by:

Amy Chan
City Manager

Attachments

- A. Sunnyvale Bicycle Plan Update – Study Issue Paper
- B. Proposed 2006 Sunnyvale Bicycle Plan
- C. BPAC Meeting Minutes, May 18, 2006
- D. BPAC Meeting Minutes, June 22, 2006
- E. Additional Public Comments Received
- F. Negative Declaration